

Inference at * 1 1 1 1
of proof for Lemma bij_imp_exists_inv:

1. $A : \text{Type}$
2. $B : \text{Type}$
3. $f : A \rightarrow B$
4. $\forall a_1, a_2 : A. (f(a_1) = f(a_2)) \Rightarrow (a_1 = a_2)$
5. $g : B \rightarrow A$
6. $\forall b : B. f(g(b)) = b$

$\vdash \exists g : B \rightarrow A. \text{InvFuns}(A; B; f; g)$
by ((With g (D 0))
CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n
), (first_nat 3:n)) (first_tok :t) inil_term))))).

1:

$\vdash \text{InvFuns}(A; B; f; g)$

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